Obesity leads to chronic kidney disease

World Kidney Day highlights obesity as a CKD risk factor

March 1, 2017

The focus of this year’s World Kidney Day is “Kidney Disease & Obesity – Healthy Lifestyle for Healthy Kidneys!” It is widely known that obesity is a risk factor for diabetes, hypertension, heart attacks and even cancer, but so far, it has not really been linked with chronic kidney disease (CKD), at least not in the public awareness.

But many studies have shown that CKD has to be added on the list of secondary diseases caused by obesity. "Being overweight is indeed a very strong risk factor for CKD”, explains Professor Carmine Zoccali, editor-in-chief of ndt, one of the two official journals of the ERA-EDTA (European Renal Association-European Dialysis and Transplant Association). "It even has a double negative effect on kidney function”.

First, it impacts kidney function via hypertension and diabetes. These diseases strike obese people more often than others and harm the kidneys, especially, if they are not treated sufficiently.

Second, there are the direct effects: In obese people the production of certain hormones, adiponectin, leptin, and resistin, is higher than in people of normal weight. The higher hormone levels go along with inflammation, oxidative stress, abnormal lipid metabolism, activation of the renin-angiotensin-aldosterone system, and increased production of insulin and insulin resistance. These various effects result in pathologic changes in the kidneys. As Professor Zoccali points out, the incidence of these so-called obesity-related glomerulopathy has increased 10-fold between 1986 and 2000! – “This is a dramatic increase”.

But obesity does not only increase the risk of CKD, but also the risk of developing kidney stones and even kidney cancer. All this is explained in a recently-published editorial by Csaba P. Kovesdy, Susan L. Furth and Carmine Zoccali (for the World Kidney Day Steering Committee) in "Kidney International” [1]. Having read this article, it becomes clear that one of the most important measures to protect the kidneys is to avoid obesity. “We hope that the World Kidney Day stirs awareness and really gets this message across”, says Professor Zoccali.

About ERA-EDTA

With almost 7,000 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. It also supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all activities ERA-EDTA has the Young Nephrologists’ Platform (YNP), a very active committee whose board includes members who are 40 years old or younger. Besides, it has established various working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board was established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: several series of CME-courses as well as the annual congress offer an attractive scientific programme to cover the need of continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association's journals, NDT (Nephrology, Dialysis, Transplantation) and ckj (Clinical Kidney Journal), are currently the leading nephrology journals in Europe; furthermore NDT-Educational is the online educational journal, open for free to all uses, of the Society as well as the very important and useful feature of NDT-Educational "Literature Review". The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. ENP, the European Nephrology Portal, is the latest new initiative of ERA-EDTA: here all those interested in the activities of the Society can find everything that is done, all in one place! Finally, ERA-EDTA is member of the European Kidney Health Alliance (EKHA), a consortium of patients, nurses, foundations all related to renal issues that actively interacts with the European Parliament. For more information please visit www.era-edta.org